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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,420	08/23/2000	Richard David Day	60095-0039	5648

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SAN JOSE, CA 95110

EXAMINER
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TODD, GREGORY G

ART UNIT	PAPER NUMBER
2457	

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

<b>Application No.</b> 09/648,420	<b>Applicant(s)</b> DAY ET AL.	
<b>Examiner</b> GREGORY G. TODD	<b>Art Unit</b> 2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 22 July 2009.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-14 and 21-34 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-14 and 21-34 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \*   c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to applicant's amendment filed, 22 July 2009, of application filed, with the above serial number, on 28 August 2000 in which claims 1, 3-5, 7-8, 11, 13, 14, 21-25, 27-28, and 31-34 have been amended. Claims 1-14 and 21-34 are pending in the application.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: The amended term "cachig" in line 15 is suggested to be replaced with "caching". The amended term "the service that store static content" in line 21 is suggested to be replaced with "the service that stores static content". Other claim amendments similar to above and appropriate correction is required. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14 and 21-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chauhan (hereinafter "Chauhan", 6,115,752) in view of Gurijala et al (hereinafter "Gurijala", 6,601,090).

As per Claim 1, Chauhan teaches a method, comprising:

receiving a request on a DNS server from a client for a web page at a first web address, the first web address including a hostname (request for address) (at least col. 6, lines 45-53);

determining traffic loads of a plurality of mirrored customer web servers each addressable by the requested hostname among a customer's plurality of web servers, each of the customer web servers storing the web page (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

sending the IP address of the customer web server to the client (ONS routing request) (at least Fig. 4); thereafter

receiving a request from the client for content on the web page at a second web address, the second web address specifying a network of servers (request for an address) (at least col. 6, lines 45-53);

determining service metrics of a set of servers each addressable by the second web address in the network of servers, the network of servers does not include (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a server from the set of servers that is appropriate for the request for content, the server having service metrics better than service metrics of remaining servers from the set of servers (mirrored server with best route) (at least col. 7, lines 24-42).

Chauhan does not explicitly teach caching servers as having cached static content thereon to further mirror data of a customer webpage and a customer is a customer of a service for use of the network of caching servers managed by the service that store static content for the customer, the network of caching servers does not include the customer's plurality of web servers. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Gurijala. Gurijala teaches the use of web cache servers wherein an Intranet/customer accesses web cache servers for static content requested by a client within the Intranet, to decrease costs associated with Internet accesses being used to access the content, with the Web cache servers residing between the Intranet and Internet, and thus, different servers from the internet servers the client is trying to access (at least col. 1:40-67; col. 6:2-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Gurijala's cache servers into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic and charges/fees on

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mirror sites and use Chauhan's optimizing address name translating with Gurijala's cache servers so as to limit external accesses to data resulting in costs and load decreases, as Gurijala teaches. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to clients, as Gurijala teaches, and to also use mirror servers as Chauhan teaches.

As per Claim 2.

determining load of servers in the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53);

wherein determining the server from the network of servers that is appropriate for the request, the server having a latency and a load lower than latency or load of the remaining servers from the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53).

As per Claim 3.

Chauhan does not teach caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Gurijala:

determining whether the caching server includes the static content;  
determining a customer web server that includes the static content when the caching server does not include the static content (at least Gurijala col. 2:31-50; 6:2-15);

retrieving the static content from the customer web server that includes the static content (at least Gurijala col. 2:31-50; 6:2-15); and

storing the static content from the customer web server in the caching server (caching static content) (at least Gurijala col. 2:31-50; 6:2-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Gurijala's static page caching into Chauhan's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 4.

wherein the determining the customer web server that includes the static content step comprises:

determining traffic loads of the plurality of mirrored customer web servers, each of the customer web servers storing the static content (mirror servers) (at least col. 3, lines 39-53); and

determining a second customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the second customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (best route to mirror server) (at least col. 3, lines 39-53).

As per Claim 5.

Chauhan does not teach caching from another server. However, the use and advantages for using such a caching protocol is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Gurijala. Gurijala

teaches wherein retrieving the static content from the customer web server step comprises:

determining an IP address of the second customer web server (at least Gurijala col. 2:31-50; 6:2-15; 4:8-19; URI/IP address of page); and

requesting the static content from the second customer web server at the second customer web server IP address (at least Gurijala col. 2:31-50; 6:2-15; 4:8-19).

As per Claim 6.

wherein the network of servers includes a domain name server (at least col. 1, lines 41-67; Gurijala col. 4:28-30).

As per Claim 7.

wherein the request from the client for the web page is transferred from a first domain name server (local name server) (at least Fig. 4);

wherein the network of servers includes a second domain name server (ONS) (at least Fig. 4; col. 3, lines 23-38); and

wherein the second domain name server determines the customer web server from the plurality of mirrored customer web servers (ONS determines mirror server) (at least col. 3, lines 39-53).

As per Claim 8, Chauhan teaches a method, comprising:

receiving a first request on a DNS server from a client DNS server to resolve a first domain name, the client DNS server receiving a request from a client of a web page address that includes the first domain name (request for address) (at least col. 6, lines 45-53);



determining load measurements of a plurality of mirrored customer web servers each addressable by the first domain name among a customer's plurality of web servers, each of the customer web servers addressable by the first domain name, and each of the customer web servers configured to service the request from the client (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers, the customer web server having a traffic load lower than traffic loads of other customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

providing the IP address of the customer web server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53); thereafter

receiving a second request from the client DNS server to resolve a second domain name, the client DNS server receiving a request from the client of a uniform resource locator obtained from the web page associated with the web page address that includes the second domain name (request for an address) (at least col. 6, lines 45-53);

determining performance metric measurement of a set of servers each addressable by the second domain name in a network of servers (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a server from the set of servers, the server having performance metrics lower than performance metrics of other servers from the set of servers (mirrored server with best route) (at least col. 7, lines 24-42); and

delivering an IP address of the server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53).

Chauhan does not explicitly teach caching servers as having cached static content thereon to further mirror data of a customer webpage and a customer is a customer of a service for use of the network of caching servers managed by the service that store static content for the customer, the network of caching servers does not include the customer's plurality of web servers. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Gurijala. Gurijala teaches the use of web cache servers wherein an Intranet/customer accesses web cache servers for static content requested by a client within the Intranet, to decrease costs associated with Internet accesses being used to access the content, with the Web cache servers residing between the Intranet and Internet, and thus, different servers from the internet servers the client is trying to access (at least col. 1:40-67; col. 6:2-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Gurijala's cache servers into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic and charges/fees on mirror sites and use Chauhan's optimizing address name translating with Gurijala's cache servers so as to limit external accesses to data resulting in costs and load

decreases, as Gurijala teaches. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to clients, as Gurijala teaches, and to also use mirror servers as Chauhan teaches.

As per Claim 9.

wherein the load measurements comprise latency measurements (at least col. 2, lines 1-9, 42-57).

As per Claim 10.

wherein the performance metric measurements comprise any of: load CPU and memory measurements, HTTP response measurements, and FTP response measurements (load, ping) (at least col. 2, lines 14-33; col. 3, lines 54-66).

As per Claim 11.

Chauhan does not disclose caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Gurijala. Gurijala discloses:

in response to receiving the uniform resource locator request at the caching server, determining whether the caching server includes the data (at least Gurijala col. 2:31-50; 6:2-15);

retrieving data from a second customer web server from the plurality of mirrored customer web servers when the server does not include the data (at least Gurijala col. 2:31-50; 6:2-15); and

storing the data within the server (caching static content) (at least Gurijala col. 2:31-50; 6:2-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Gurijala's static page caching into Chauhan's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 12.

wherein retrieving data from the second customer web server step comprises:  
determining the second customer web server from the plurality of mirrored customer web servers, the second customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (at least col. 2, lines 14-33; col. 3, lines 39-53); and

retrieving the data from the second customer web server (download content) (at least col. 2, lines 1-9).

As per Claim 13.

receiving a first request from a second client DNS server to resolve a third domain name, the second client DNS server receiving a request from a second client of a second web page address that includes the third domain name (at least Fig. 4);

determining load measurements of a plurality of second customer web servers each addressable by the third domain name among a customer's plurality of web servers, each of the second customer web servers addressable by the third domain name, and each of the second customer web servers storing data configured to service the request from the second client (mirrored servers) (at least Fig. 4);

determining a second customer web server from the plurality of second customer web servers, the second customer web server having a traffic load lower than traffic loads of other second customer web servers from the plurality of second customer web servers; determining an IP address of the second customer web server (at least col. 2, lines 14-33; col. 3, lines 39-53); and

providing the IP address of the second customer web server to the second client DNS server (IP2) (at least Fig. 4).

As per Claim 14.

Chauhan inherently discloses more than one client using the system, and that with any client, the mirror site with the best performance characteristics will be chosen as the server to retrieve content from thereon:

receiving a second request from the second client DNS server to resolve the second domain name, the second client DNS server receiving a request from the second client of a second uniform resource locator that includes the second domain name (at least Fig. 4; col. 2, lines 10-33);

determining performance metric measurement of the set of caching servers (at least Fig. 4; col. 2, lines 10-33);

determining a second caching server from the set of caching servers, the second caching server having performance metrics lower than performance metrics of other caching servers from the set of caching servers (at least Fig. 4; col. 2, lines 10-33); and

delivering an IP address of the second caching server to the second client DNS server (at least Fig. 4; col. 2, lines 1-33).

Claims 21-34 do not substantially add or define any additional limitations over claims 1-14 and therefore are rejected for similar reasons.

### ***Response to Arguments***

5. Applicant's arguments filed 22 July 2009 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

The applicant is further reminded that any general allegation of patentability does not specify, as required, how the highlighted language patentably distinguishes the claimed invention. This form of argument is wholly ineffective in demonstrating error in the Examiner's prima facie case to establish the patentability of the claims. *Ex parte Belinne*, Appeal No. 2009-004693, decided Aug. 10, 2009, (BPAI) (informative). Available at: <http://www.uspto.gov/web/offices/dcom/bpai/its/fd09004693.pdf>.

Applicant argues, in substance, that Chauhan does not make any distinction between his mirrored servers as Chauhan states his ONS requests round trip times from all the mirrored servers and does not contemplate determining traffic loads of a plurality of mirrored customer web servers. Clearly Chauhan is teaching resolving a name request for a server and determining the best/fastest and least loaded mirrored server for the request (col. 7:25-42). Thus, the substance of argument can be, at best, that Chauhan teaches determining load on **all** the mirrored servers while the claims determine load on only a **plurality** of mirrored servers. There is no distinction between all and plurality in the claims. The plurality, for example, is not claimed as being only a set of all the mirrored servers, thus Chauhan's determination of all servers is a plurality of servers.

Applicant further argues Chauhan does not teach a set of caching servers in a network of caching servers. The rejection relies on Gurijala for substantially teaching the claim terminology, thus as above, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Newly patented Gupta et al and Swildens et al, are cited for potential double patenting purposes, in addition to previously cited Hsu et al, Edelstein et al, Dujari et al, Scharber, Guenther et al, Shimomura et al (see col. 14, lines 15-27), Lara et al, Kenner et al, Levy, Jordan et al, Kumar et al, Jacobs et al, Amicangioli, Heddaya et al, Schuba, Bharat et al, Lewis et al, O'Neil et al, Bolton et al, Emens et al, Shah, Leighton et al, Logan et al, Rune, Sitaraman et al, Malcolm, Herriot, Kapoor, and Gupta et al are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY G. TODD whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-5:30pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/G. G. T./  
Examiner, Art Unit 2457

/ARIO ETIENNE/  
Supervisory Patent Examiner, Art Unit 2457